

(12) **UK Patent Application** (19) **GB** (11) **2 353 282** (13) **A**

(43) Date of Printing by UK Office 21.02.2001

(21) Application No **0024727.0**(22) Date of Filing **19.03.1999**

(30) Priority Data

(31) **PP2492**(32) **20.03.1998**(33) **AU**(31) **PP2499**(32) **20.03.1998**

(86) International Application Data

PCT/AU99/00195 En 19.03.1999

(87) International Publication Data

WO99/49029 En 30.09.1999

(71) Applicant(s)

Benitec Australia Ltd**(Incorporated in Australia)****Level 4, 62 Pitt Street, Sydney, NSW 2000, Australia****State of Queensland through its Department of
Primary Industries****(Incorporated in Australia)****Primary Industries Building, 80 Ann Street, Brisbane,
QLD 4000, Australia**

(72) and (74) continued overleaf

(51) INT CL⁷**C12N 15/11**

(52) UK CL (Edition S)

C3H HB7M HB7T HB7X H643 H656 H657 H683 H684**H687****U1S S1304 S1334 S2410**

(56) Documents Cited by ISA

WO 98/53083 A**Cell, 1999, Vol. 96(3), pages 303-6 Developmental****Genetics, 1998, Vol. 22(1), pages 100-9 Plant Molecular****Biology, 1993, Vol. 22(6), pages 1067-85 The Plant****Journal, 1998, Vol. 15(6), pages 737-46 Annals of****Botany, 1997, Vol. 79(1), pages 3-12 Genetics, 1997,****Vol. 147(3), pages 1181-90 Cell, 1994, Vol. 77(7), pages****993-1002 Plant Cell, 1996, Vol. 8, pages 2277-94**

(58) Field of Search by ISA

Online: WPAT; MEDLINE; CHEMICAL ABSTRACTS

(54) Abstract Title

Control of gene expression

(57) The present invention relates generally to a method of modifying gene expression and to synthetic genes for modifying endogenous gene expression in a cell, tissue or organ of a transgenic organism, in particular a transgenic animal or plant. More particularly, the present invention utilises recombinant DNA technology to post-transcriptionally modify or modulate the expression of a target gene in a cell, tissue, organ or whole organism, thereby producing novel phenotypes. Novel synthetic genes and genetic constructs which are capable of repressing delaying or otherwise reducing the expression of an endogenous gene or a target gene in an organism when introduced thereto are also provided.

GB 2 353 282 A

Best Available Copy

(72) Inventor(s)

**Michael Wayne Graham
Robert Norman Rice**

(74) Agent and/or Address for Service

**D Young & Co
21 New Fetter Lane, LONDON, EC4A 1DA,
United Kingdom**